

THE MOTHS OF INDIA.
 SUPPLEMENTARY PAPER TO THE VOLUMES IN
 "THE FAUNA OF BRITISH INDIA."

PART VI.

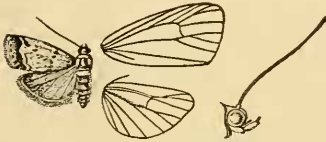
BY SIR G. F. HAMPSON, BART., F.Z.S., F.R.S.

(Continued from page 314 of this Volume.)

Genus EUZOPHERODES.

Euzopherodes.—Rag., Rom. Mem., viii. ined.*Type*.—*E. ALBICANS*.—Rag.*Range*.—Bengal ; Ceylon.

Palpi upturned, the second joint cylindrical, the third short ; maxillary palpi filiform ; frons rounded ; antennæ of male almost simple. Forewing with the costa nearly straight, the apex rectangular ; veins 3 and 5 stalked ; 4 absent ; 8, 9 stalked, 10 from cell. Hind



Euzopherodes albicans ♂ $\frac{1}{2}$. wing with the cell long ; vein 2 from well before angle ; 3 and 5 on a long stalk ; 4 absent ; 6, 7 from upper angle ; 7 anastomosing with 8.

4341a. EUZOPHERODES ALBICANS, Rag., Rom. Mem., viii. ined., pl. xxxi, f. 23.

♂. Head, thorax and abdomen greyish white with a brown tinge. Forewing greyish white, irrorated with brown ; the base brown ; the first line brown, broad, prominent and erect, bent outwards at median nervure ; the second line oblique from costa to vein 6, then excurved to vein 2 with a second line beyond and parallel to it ; a prominent discoidal point at lower angle of cell ; a marginal series of points. Hindwing suffused with pale brown ; the cilia white.

Habitat.—Calcutta ; Ceylon. *Exp.* 16mm.

4343a. EUZOPHERA HEMICAUTELLA, Hmps., Rom. Mem., viii. ined., pl. 47, f. 25.

♂. Maxillary palpi filiform ; antennæ with slight sinus at base of shaft ; mid and hind tibiæ fringed with long hair on both sides ; forewing with a costal fold below, extending to two-thirds of wing ; hindwing with veins 3 and 5 stalked.

Head and thorax fuscous brown ; abdomen paler. Forewing dark brown, the cell suffused with ferruginous-red with a purplish tinge ; a postmedial pale brown curved line strongly defined by a blackish line

on inner side and slightly by fuscous on outer side. Hindwing semi-hyaline slightly tinged with fuscous; the veins, a marginal line, and line through cilia fuscous.

Habitat.—Puttalam, Ceylon (Pole). *Exp.* 16mm. *Type*—In British Museum.

4351. NEPHOPTERYX BASISIGNELLA, belongs to Sect. III, D. A.

♂. Forewing with suffused black scales along median nervure below; hindwing with streaks of black scales along median nervure and nervules, and a few on subcostal veins.

Sect. I., 4382a. MYELOIS STRIGIVENELLA, Hmps., Rom. Mem., viii. ined., pl. 55, f. 13.

♂. Head and thorax brown slightly tinged with grey; abdomen ochreous suffused with grey-brown. Forewing grey; the veins strongly streaked with dark brown; the whole inner area suffused with dark brown; cilia grey-brown with a pale line at base. Hindwing semi-hyaline silky white; the veins slightly darker; the costa brown; a fine brown marginal line and line through the cilia.

Habitat.—Khasis. *Exp.* 26mm.

4387a. PHYCITA SYMPHONIELLA, Hmps., Rom. Mem., viii. ined., pl. 56, f. 16.

Head, thorax and abdomen grey-brown slightly irrorated with fuscous. Forewing variegated with grey, red-brown, dark-brown and black shades; an oblique dark-edged white line from cell to inner margin, with a tuft of raised dark scales on its inner edge and a triangular rufous patch beyond it on the inner side of the sinuous dark edged white medial line, which has diffused black beyond its costal portion; two prominent black discocellular specks; a submarginal whitish line angled outwards on vein 6 and defined by a black line on its inner edge, some rufous suffusion beyond it; the margin grey with a series of black specks. Hindwing pale fuscous, rather darker towards margin; cilia paler with a fine dark line through them.

Habitat.—Khasis. *Exp.* 24mm.

4389a. Antennæ of male with the shaft slightly curved near base with scale-teeth in the sinus.

PHYCITA POLYPTYCHELLA, Rag., Rom. Mem., vii. p. 244, pl. 16, f. 34.

♂. Head, thorax and abdomen greyish-brown mixed with dark brown and ochreous scales. Forewing grey, thickly irrorated with

dark brown; a pale antemedial angulate mark from submedian fold to inner margin; two discocellular black specks; a submarginal pale line defined on each side towards costa by fuscous, oblique from costa to vein 6, then bent outwards and minutely dentate; a marginal series of dark points. Hindwing semi-hyaline brownish with fine marginal brown line.

Habitat.—Persia; Goorais Valley, Kashmir. *Exp.* 30mm.

Sect. III. A. 4391. PHYCITA CHLOROPTERELLA.

Palpi of male with the second joint hollowed out to receive the brush-like maxillary palpi; frons with tuft of hair; antennæ thickened and flattened with sinus and ridge of scales at base.

P. 93. 4392a.—PHYCITA SEMIUSTA, Hmps., Rom. Mem., viii. ined., pl. 56, f. 7.

♀. Head and thorax ochreous brown; abdomen ochreous with black dorsal tufts on first two segments. Forewing with the basal half ochreous; an almost medial line of raised scales with a few dark scales on its inner edge, and a prominent black patch on inner margin; the outer half of wing dark rufous with a broad postmedial band of dark grey-brown; the margin grey with a series of black specks. Hindwing pale fuscous; the fringe on median nervure ochreous; the cilia whitish.

Habitat.—Gambia; Sikhim; 1,800' (Dudgeon). *Exp.* 22mm. *Type*—In British Museum.

4393. PHYCITA STENIELLA belongs to Sect. I. c, except that the antennæ have the shaft laminate instead of ciliated.

4394. *Phycita albilacalis* = PHYCITA (*Hyalospila*) LEUCONEURELLA, Rag., Rom. Mem. vii, p. 170.

Antennæ of male with slight ridge of scales at base of shaft and long uniseriate pectinations.

4400. *Phycita hemixanthella* = 4401. PHYCITA TRANSLUCIDELLA.

4410a. RHODOPHÆA ENDOLEUCELLA. Hmps., Rom. Mem. viii. ined. pl. 56, f. 1.

♂. Antennæ with a large sinus at base of shaft with a scale-tooth before it on upperside, and a series of spines in the sinus; collar with a large tuft of hair at middle, mid and hind tibiæ fringed with long hair; forewing with the inner area on underside clothed with yellow

scales, and with an elongate oval patch of leaden grey scales at middle.

Head, thorax and abdomen olive brown ; vertex of head whitish ; metathorax purplish grey. Forewings moss green, olive yellow towards base ; a medial dark line oblique from costa to below cell and angled inwards on vein 1, with a large rounded yellowish white patch on its inner side from middle of cell to inner margin, and an elongate patch beyond it, extending along inner margin to the postmedial line, which is nearly straight from costa to vein 6, then dentate, the teeth ending in white points, then angled outwards and with two white marks on it on vein 1 ; a large obscure black discocellular ocellus ; the outer area purplish fuscous, except towards costa ; a large white patch on the margin below apex. Hindwing purplish fuscous, suffused with olive yellow towards costa ; cilia tipped with white.

Habitat.—Khásis. *Exp.* 30mm.

4410*b*. RHODOPHLEA FLAVICOLLARELLA, Hmps., Rom. Mem, viii. ined., pl. 56, f. 3.

♂. Palpi orange ; vertex of head white ; antennæ blackish ; collar orange, black at throat ; thorax green and black, with white scales on metathorax ; abdomen blackish, dorsally banded with orange towards base. Forewing with the basal area orange with some green at base of costa, and green irrorated with white on costa, before the antemedial broad, very irregular, shining white band edged by black lines, enclosing a black spot on costa, dentate inwards below costa and on median nervure, contracting in cell and at inner margin, and with a white spot beyond it above vein 1 ; the discal area moss green, with some orange marks on and below costa and, an obscure black discoidal ocellus with diffused black below and beyond it ; the outer half of inner area purplish with an orange patch beyond lower angle of cell, and a postmedial patch on vein 1 ; the postmedial line white arising from a spot on costa, then dentate, and angled inwards below vein 2 ; a large white patch on outer margin below apex ; a marginal series of black points. Hindwing pale brownish with fine brown marginal line and line through the cilia.

Structural characters as in *endoleucella*, except that the antennal scale-tooth is larger, and the yellow scales and oval patch on forewing obsolete.

Habitat.—Khâsis. *Exp.* 24mm.

4415a. RHODOPHLEA NIGRALBELLA, Hmps., Rom. Mem. viii. ined. pl. 55, f. 14.

♂. Head and thorax black brown; abdomen paler brown. Forewings deep black brown; a triangular white patch on basal area extending along costa almost to middle; a medial white line from below cell to inner margin; a large postmedial triangular white patch on costa with its apex at lower angle of cell, and with the discocellular black points on it; a postmedial oblique white line slightly bent outwards at middle; some white on the margin below apex and a marginal series of black points. Hindwing dark fuscous.

Habitat.—Khâsis. *Exp.* 16mm.

4419a. SPATULIPALPIA LOPHOPTERELLA, Hmps., Rom. Mem. viii. ined. pl. 52, f. 27.

♂. Head and thorax black brown; abdomen fuscous with pale anal tuft. Forewing deep red brown irrorated with a few white scales; the costal area deep black; the tuft in cell black and grey; black streaks between the veins of outer area; a fine postmedial line of white scales strongly angled inwards on vein 1; cilia grey at tips. Hindwing semi-hyaline white, the veins, a marginal line and the base of cilia fuscous.

Habitat.—Khâsis. *Exp.* 18 mm.

This species belongs to Sect. III., but has the fold and fan of scales on forewing as in *flabellifera*.

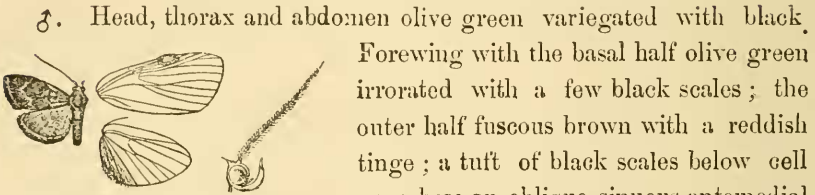
Genus OMPHALOTA, nov.

Type.—*O. chlorobasis*, Hmps.

Range.—N.-W. Himalayas.

Palpi upturned, slender, the 2nd joint reaching vertex of head, the 3rd well developed and acuminate; maxillary palpi filiform; antennae with long cilia. Forewing with the cell short; vein 3 from close to angle; 4, 5 stalked and curved downwards near base in male; 6 down curved; 7, 8, 9 on a long stalk and curved; 10 curved with a large glandular swelling on costa above it. Hindwing with vein 3 from close to angle of cell; 4, 5 shortly stalked; 6, 7 from upper angle; 8 free; the inner area clothed with long rough hair.

4438a. OMPHALOTA CHLOROBASIS, n. sp.



Omphalota chlorobasis. ♂ $\frac{1}{2}$.

♂. Head, thorax and abdomen olive green variegated with black. Forewing with the basal half olive green irrorated with a few black scales; the outer half fuscous brown with a reddish tinge; a tuft of black scales below cell near, base an oblique sinuous antemedial black line; a postmedial minutely dentate line highly excurved from below costa to vein 2, where it is bent inwards and bounds the olive green area, its outer side defined by ochreous; cilia reddish and fuscous. Hindwing fuscous with traces of a pale curved postmedial line.

Habitat.—Simla. *Exp.* 21 mm. *Type*.—In coll. Rothschild.

Sect. I (bis), (*Macalla*). Palpi of male with the 2nd joint hollowed out to receive the brush-like maxillary palpi, the 3rd joint short; antennæ with very long thickly scaled process from basal joint.

4438b. MACALLA HYPOXANTHA, Hmps., *Trans. Ent. Soc.*, 1896, p. 465.

♂. Head and thorax black with a few ochreous scales; abdomen wholly black. Forewing fuscous, the areas below basal part of median nervure, at apex and outer angle, tinged with rufous; an indistinct obliquely sinuous antemedial black line; large tufts of black scales in end of cell and on discocellulars; a minutely dentate black postmedial line oblique and defined by grey from costa to vein 4, where it is strongly angled, and angled inwards below vein 2. Hindwing ochreous, suffused with fuscous, especially on outer half; brownish ochreous below, the costa suffused with black.

Habitat.—Sikhim, 1,800'. *Exp.* 26mm.

4445a. MACALLA HYPNONALIS, n. sp.

♂. Maxillary palpi filiform; antennæ with short process from basal joint; forewing with glandular swelling on costa.

Head and thorax olive green and black; abdomen pale red-brown. Forewing with the basal costal and outer areas olive green and black; the medial area pale red-brown irrorated with dark red-brown and fuscous scales; an obscure pale waved antemedial line bounding the dark basal area; a dentate black postmedial line incurved below vein 2; a marginal series of black points; cilia vinous red. Hindwing pale,

tinged with vinous red; an obliquely curved fuscous postmedial line, retracted at vein 2, then obsolescent; apical area black to vein 2; cilia vinous red.

Habitat.—Sikkim, 1,800' (Dudgeon). *Exp.* 32mm. *Type*.—In British Museum.

Genus EPITAMYRA.

Epitamyra.—Rag. Ann. Soc. Ent. Fr. 1890, p. 503.

Provopera.—Warr. A. M. N. H. (6) xvii., p. 453 (1896).

Type.—*E. albomaculalis*. Moschl. from the West Indies.

Range.—W. Indies; Assam.

Palpi rostriform, down curved, smoothly scaled and extending about twice the length of head; antennæ ciliated; tibiæ smoothly scaled. Forewing with the apex somewhat produced; the outer margin angled and falcate at vein 4; vein 3 from before angle of cell; 4, 5, from angle; 6 from upper angle; 7, 8, 9 stalked; 10, 11 free; male with a glandular swelling fringed with long hair on base of costa below. Hindwing with the outer margin slightly angled at vein 2; vein 2 from before angle of cell; 4, 5 from angle; 6, 7 from upper angle, 7 anastomosing with 8.

In the Typical species vein 10 of the forewing is stalked with 7, 8, 9.

4482a. EPITAMYRA VINOSALIS, Warr. A. M. N. (6) xvii, p. 454.

3. Head and thorax purplish red mixed with darker purple; abdomen fuscous, purplish red above.



Forewing purplish red slightly irrorated with black and crossed by two irregularly waved ante and two similar postmedial red lines, with a white speck on costa; some fuscous suffusion from middle of cell to middle of outer

Epitamyra vinosalis ♂¹. margin; a prominent black discocellular spot; a series of black marginal specks; cilia whitish at tips. Hindwing fuscous with traces of dark postmedial and submarginal lines terminating at vein 2, where there is a pinkish patch on outer area; cilia pink from apex to vein 2.

Habitat.—Khásis. *Exp.* 22mm.

4492. ENDOTRICHA RUMINALIS.

Hindwing of male with a fold on inner area containing androconia.

4497a. ENDOTRICHA RUFOTERMINALIS. Chirst Bull-Mosc, lvi, p. 34 ; *Cangetta, venustalis* Warr., A. M. N. H. (6) xvii, p. 464.

♀. Head, thorax and abdomen whitish tinged with fuscous and brown. Forewing with the base pure white ; the medial area fuscous grey, a triangular white postmedial patch from costa to vein 2 with a rufous line on its outer edge, the apical area beyond it being fuscous and bright rufous traversed by a series of dark rufous specks. Hindwing with the base white ; the inner area fuscous ; the outer part of cell and area beyond it bright rufous with a hyaline speck in the cell and bounded by a rufous line sharply angled on vein 2 ; some fuscous suffusion on postmedial area ; the margin white.

Habitat.—Amur ; Khâsis. *Exp.* 16mm.

4499a. CANGETTA HOMOPERALIS, n. sp.

♀. Fuscous grey. Forewing with indistinct dark antemedial line angled on median nervure ; a postmedial line with white mark inside in on costa and obtusely angled at middle ; a dark marginal line. Hindwing with indistinct dark curved ante- and post-medial lines ; a dark marginal line.

Habitat.—Puttalam, Ceylon (J Pole). *Exp.* 12mm. *Type.*—In British Museum.

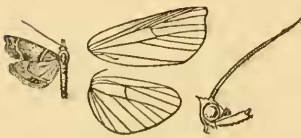
Genus DIPLOPSEUSTIS.

Diploseustis, Meyr. Trans. Ent. Soc. 1884, p. 284.

Type.—*D. perieresalis*, Wlk.

Range.—Formosa ; India ; Perak ; Australia ; N. Zealand ; Fiji.

Palpi porrect, the 2nd joint extending about twice the length of head and thickly scaled, the 3rd obliquely upturned and set on before the apex of the 2nd joint ; maxillary palpi large and triangularly scaled ; frons oblique ; antennæ of male somewhat thickened and flattened ; tibiæ with the outer spurs about half the length of inner.



Diploseustis perieresalis ♂ $\frac{1}{2}$

Forewing with the apex somewhat acute ; the outer margin excised

below apex; vein 3 from close to angle of cell; 4, 5 stalked; 6 from upper angle; 7, 8, 9 stalked; 10, 11 free. Hindwing with the outer margin excised below apex; vein 3 from angle of cell; 4, 5 stalked; 6, 7 from upper angle.

4502a. *DIPLOPSEUSTIS PERIERESALIS*, Wlk. Cat. xix, p. 958.

Cymoriva minima, Butl. P. Z. S. 1880, p. 684.

Diplopseustis constellata, Warr. A. M. N. H. (6) xvii, p. 464.

Diplopseustis pallidalis, Warr., A. M. N. H., (6) xvii, p. 465.

Sufetula nana, Warr., A. M. N. H. (6), xviii, p. 225.

♂. Head, thorax and abdomen brown variegates with grey; palpi blackish at sides. Forewing fuscous brown with short dark striae; some ochreous on basal half of inner area; a series of white specks on costa, two beyond middle forming semicircles; and sinuous white antimedial line defined by dark on outer side; a white discocellular spot with some specks beyond it; a submarginal white line excurved between veins 6 and 3; cilia with white tips; white lunules on margin above and below the excurved portion. Hindwing pale at base, fuscous towards margin; a sinuous white submarginal line from vein 5 to above anal angle.

♂. Much more uniform grey-brown with the white markings obscured.

Habitat.—Formosa; Khásis; Bombay; Ceylon; Perak; Australia; N. Zealand; Fiji. *Exp.* ♂, 14, ♀, 22mm.

Genus TRIEROPIS.

Trieropis.—Meyr. Trans. Ent. Soc. 1886, p. 218.

Type.—*T. nesias*, Meyr.

Range.—Ceylon. Australian region.

Palpi porrect, rostriform, down curved, in male extending about four times length of head and hollowed out to receive the long tufted maxillary palpi, in female extending about three times length of head, the maxillary palpi triangularly scaled; frons produced to a flattened projection in male; antennae thickened and annulate; tibiae with the spurs long and even. Forewing with the apex produced to a point, the outer margin excurved at middle; veins 3, 4, 5 from angle of cell; 6 from upper angle; 7, 8, 9, 10, stalked; 11 free. Hindwing with veins 3, 4 from angle of cell; 5 from above angle; 6, 7 from upper angle.

4502b. *TRIEROPIS NESIAS*, Meyr. Trans, Ent. Soc. 1886, p. 218.

Cretaceous white slightly tinged with fuscous. Forewing with in-



Trieropis nesias. ♂ $\frac{1}{2}$

distinct curved fuscous subbasal line ; a minutely waved antemedial curved line defined by clearer white on inner side ; a white discocellular spot ; a fine double curved postmedial line highly excurved beyond cell and oblique towards costa ; traces of a

fuscous submarginal line parallel to the postmedial line ; a chestnut brown marginal band from apex to vein 3 defined by a fine black line on inner side. Hindwing with ante- and post-medial slightly curved and waved black lines, the area between them purer white ; an indistinct line beyond the postmedial line and sinuous submarginal line ending at anal angle ; a fine black marginal line.

Habitat.—Ceylon ; Queensland ; Tonga. *Exp.* 16 Mill.

4504a. *TRICHOPHYSETIS METAMELALIS*, n. sp.

♀. Head black ; thorax whitish ; abdomen ochreous. Forewing whitish suffused with golden yellow and with a cupreous tinge towards outer margin ; traces of ante- and post-medial curved yellow lines. Hindwing with the base yellowish white ; the medial area cupreous, the outer fuscous ; indistinct fuscous antemedial and medial lines ; cilia of both wings whitish with fuscous lines at base and middle.

Habitat.—Khásis. *Exp.* 20 Mill. *Type*. In British Museum.

4506a. *TRICHOPHYSETIS FUMILAUTA*, Warr., A. M. N. H. (6) xvii, p. 465.

White slightly suffused with fuscous ; palpi blackish at sides ; both wings with indistinct double ante- and post-medial fuscous lines, the latter slightly excurved beyond cell of forewing ; forewing with large fuscous apical patch slightly tinged with fulvous at costa and with a fuscous-edged fulvous marginal band from costa to vein 5.

Habitat.—Khásis. *Exp.*, 14 mm.

4521. *HYPSOPYGIA OLIVALIS*, insert (*syn*) *Ulotrichodes novalis*, Warr., M. N. H., (6) xvii, p. 463, and transfer to genus *Lepidogma* of which it will form a section with no tuft on basal joint of antennæ ; forewing with vein 7 from 8 after 9.

♂. Forewing more ochreous, the black suffusion confined to the area near lower part of postmedial line ; hindwing whitish.

4546 a. *STEMMATOPHORA RECTISECTALIS*, Warr., A. M. N. H. (6) xvii, p. 460.

♂. Purplish flesh color slightly irrorated with black. Forewing with the base chocolate; a black discocellular speck; an almost straight indistinct pale postmedial line with the area beyond it rather darker; a marginal series of black spots. Hindwing with the base chocolate; a discocellular black speck; a pale curved postmedial line with black marks on its inner edge towards costa and two towards inner margin; a marginal series of black spots.

Habitat.—Pirmâd, Travangore. *Exp.* 28, mm.

4574a. *TRIPHASSA ZONALIS*, n. sp.

♂. Head, thorax and abdomen ochreous mixed with black scales, or mostly black with the base of abdomen ochreous. Forewing with the basal and outer areas ochreous irrorated with black, the medial area black, or almost entirely black; pale ante- and post-medial lines, the former obtusely angled on median nervure, the latter minutely waved and bent inwards below vein 2; a deep black discocellular lunule; a series of white specks on medial part of costa; a marginal series of prominent black points. Hindwing ochreous with minutely waved curved postmedial line; a marginal series of prominent black points and line through the cilia; the dark specimen with the veins of outer area streaked with black and a complete marginal line.

Habitat.—Khâsis. *Exp.* 30, mm. *Type*.—In British Museum.

P. 167. Under *Pyboloma*, insert *Polycampsis*, Warr. A. M. N. H. (6) xvii, p. 457.

Sect. II. (*Polycampsis*). Forewing of male with a glandular swelling at base of costa below.

4579a. *HYBOLOMA LONGINASUS*, Warr. A. M. N. H. (6) xvii, p. 458.

♂. Head and thorax rufous and grey; abdomen fuscous black, greyish at extremity. Forewing with the basal and costal areas rufous, the rest of the wing fuscous suffused with purplish red; very obliquely curved pale lines from costa at middle and near apex to near base and middle of inner margin. Hindwing fuscous black; the outer area greyer.

Habitat.—Khâsis. *Exp.*, 28, mm.

(To be continued.)